ABSTRACT OF THE INVENTION

The present invention is an efficient synthetic route to 2',3'-dideoxy-2',3'-didehydro-nucleosides from available precursors with the option of introducing functionality as needed, such as, the 2',3'-dideoxy and 2'- or 3'-deoxyribo-nucleoside analogs as well as additional derivatives obtained by subsequent functional group manipulations. Briefly, the present invention discloses a method for the preparation of β-D and β-L-2',3'-dideoxy-2',3'-didehydro-nucleosides starting from appropriately substituted ribonucleosides in two, optionally three steps: Step (1) a haloacylation, such as haloacetylation, and in particular, bromoacetylation; Step (2) a reductive elimination; and optionally, Step (3) a deprotection. The haloacylation of step (1) can form the 2'-acyl-3'-halonucleoside, the 3'-acyl-2'-halonucleoside, or a mixture thereof.